

ABSTRACT

A digital control apparatus for a switching DC-DC converter is described. The converter comprises at least one power transistor and is able to provide a regulated output voltage on a load. The apparatus comprises control digital means having in input a reference digital signal and being able to provide a modulating signal to a PWM device; the PWM device has in input the modulating signal and provides an output square wave signal for driving the power transistor of said DC-DC converter. The apparatus comprises digital means able to operate on the square wave signal to obtain that it has a non-linear modulation only when the value of a signal on the load is lower or higher than prefixed value range of said signal on the load.

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